

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A computer-implemented method for determining private information and risk attitudes for bidders comprising:

a) ~~analyzing~~ accessing, from computer system memory, auction data from previously conducted ~~utility-dependent auctions and previously conducted utility-independent auctions;~~

b) performing an analysis of said auction data, said analysis comprising accumulating said auction data into sets as a function of auction type, a first auction type comprising a utility-dependent auction in which highest bidder wins and pays the highest bid and a second auction type comprising a utility-independent auction in which highest bidder wins and pays the second highest bid;

c) ~~b)~~ determining private information for said bidders using bids submitted in said utility-independent auctions, said private information comprising information held privately by a bidder and not possessed by other bidders; and

d) ~~e)~~ determining risk attitudes for said bidders using bids from said utility-dependent auctions ~~utility-dependent auctions.~~

2. (Currently Amended) The method of Claim 1 further comprising the steps of:

e) ~~d)~~ conducting additional utility-independent auctions when said auction data from said previously conducted utility-independent auctions is not sufficient for determining said private information for said bidders; and

f) ~~e)~~ determining private information for said bidders using said auction data from said previously conducted auctions and auction data from said auctions conducted in step e) ~~d)~~ when said auction data from

said previously conducted utility-independent auctions is not sufficient for determining said private information for said bidders.

3. (Currently Amended) The method of Claim 2 wherein said determination of private information for said bidders further comprises ~~the step of~~ generating a table that indicates the joint distribution of private information for said bidders.

4. (Currently Amended) The method of Claim 2 wherein said determination of private information for said bidders further comprises ~~the step of~~ generating a graph that indicates the joint distribution of private information for said bidders.

5. (Currently Amended) The method of Claim 2 further comprising ~~the steps of~~:

g) ~~h)~~ conducting additional utility-dependent auctions when ~~auctions when~~ said auction data from said previously conducted utility-dependent auctions is ~~auctions is~~ not sufficient for determining risk attitudes for said bidders; and

h) g) determining risk attitudes for said bidders using said auction data from said previously conducted auctions and auction data from said auctions conducted in step g) ~~h)~~ when said auction data from said previously conducted utility-dependent auctions is ~~auctions is~~ not sufficient for determining said risk attitudes for said bidders.

6. (Currently Amended) The method of Claim 5 wherein said determination of risk attitudes for said bidders further comprises ~~the step of~~ generating a table that indicates said risk attitudes for said bidders.

7. (Currently Amended) The method of Claim 5 wherein said determination of risk attitudes for said bidders further comprises ~~the step~~ of generating a graph that indicates said risk attitudes for said bidders.

8. (Currently Amended) The method of Claim 3 wherein said auction data from said previously conducted ~~utility-dependent~~ ~~auctions and previously conducted utility-independent~~ auctions includes an item identifier, the number of submitted bids, the number of bidders, and the characteristics of each bidder.

9. (Original) The method of Claim 6 wherein step c) ~~b)~~ further comprises using statistical density estimation techniques to nonparametrically estimate the joint distribution of bidders' private information.

10. (Original) The method of Claim 9 wherein step d) ~~e)~~ further comprises using a "quantile matching" method to nonparametrically estimate risk attitudes for bidders.

11. (Currently Amended) ~~In a~~ A computer system comprising: ~~including~~ a processor coupled to a bus, and

a memory unit coupled to said ~~the~~ bus for storing information, and a processor coupled to said bus for performing a computer- ~~implemented~~ method for determining private information and risk attitudes for bidders, said method ~~comprising the steps of:~~

a) ~~analyzing~~ accessing, from computer system memory, auction data from previously conducted ~~utility-dependent auctions and previously~~ ~~conducted utility-independent~~ auctions;

b) performing an analysis of said auction data, said analysis comprising accumulating said auction data into sets as a function of auction type, a first auction type comprising a utility-dependent auction characterized as an English auction and a second auction type comprising a utility-independent auction characterized as a Dutch auction;

c) b) determining private information for said bidders using bids submitted in said utility-independent auctions, said private information comprising information held privately by a bidder and not possessed by other bidders; and

d) e) determining risk attitudes for said bidders using bids from said utility-dependent auctions ~~utility-dependent auctions.~~

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12. (Currently Amended) The computer system ~~computer-implemented method~~ of Claim 11 wherein said method further comprises comprising the steps of:

e) d) conducting additional utility-independent auctions when said auction data from said previously conducted utility-independent auctions is not sufficient for determining said private information for said bidders; and

f) e) determining private information for said bidders using said auction data from said previously conducted auctions and auction data from said auctions conducted in step e) d) when said auction data from said previously conducted utility-independent auctions is not sufficient for determining said private information for said bidders.

13. (Currently Amended) The computer system ~~computer-implemented method~~ of Claim 12 wherein said method further comprises comprising the steps of:

g) ~~h~~ conducting additional utility-dependent auctions when
~~auctions when~~ said auction data from said previously conducted utility-
dependent auction is ~~auctions is~~ not sufficient for determining risk
attitudes for said bidders; and

h) g) determining risk attitudes for said bidders using said auction
data from said previously conducted auctions and auction data from said
auctions conducted in step g) ~~h~~ when said auction data from said
previously conducted utility-dependent auction is ~~auctions is~~ not sufficient
for determining said risk attitudes for said bidders.

14. (Currently Amended) The computer system ~~computer-~~
~~implemented method~~ of Claim 12 wherein step g) of said method said
~~determination of risk attitudes for said bidders~~ further comprises the step
of generating a table that indicates said risk attitudes for said bidders.

15. (Currently Amended) The computer system ~~computer-~~
~~implemented method~~ of Claim 12 wherein step g) of said method said
~~determination of risk attitudes for said bidders~~ further comprises the step
of generating a graph that indicates said risk attitudes for said bidders.

16. (Currently Amended) A computer-readable storage medium
storing instructions that, when executed by a computer, cause the
computer to perform a method for determining private information and
risk attitudes for bidders comprising the step of:

a) ~~analyzing~~ accessing, from computer system memory, auction
data from previously conducted utility-dependent auctions and previously
conducted utility-independent auctions;

b) performing an analysis of said auction data, said analysis
comprising accumulating said auction data into sets as a function of

auction type, a first auction type comprising a utility-dependent auction characterized as a sealed bid first price auction and a second auction type comprising a utility-independent auction characterized as a sealed bid second price auction;

c) b) determining private information for said bidders using bids submitted in said utility-independent auctions, said private information comprising information held privately by a bidder and not possessed by other bidders; and

d) e) determining risk attitudes for said bidders using bids from said utility-dependent auctions ~~utility-dependent auctions.~~

17. (Currently Amended) The computer-readable storage medium of Claim 16 wherein said method further comprises ~~the steps of:~~

Q6 e) d) conducting additional utility-independent auctions when said auction data from ~~said~~ previously conducted utility-independent auctions is not sufficient for determining said private information for said bidders; and

f) e) determining private information for said bidders using said auction data from said previously conducted auctions and auction data from said auctions conducted in step e) d) when said auction data from ~~said~~ previously conducted utility-independent auctions is not sufficient for determining said private information for said bidders.

18. (Currently Amended) The computer-readable storage medium of Claim 17 wherein said determination of private information for said bidders further comprises ~~the step of~~ generating a table that indicates the joint distribution of private information for said bidders.

19. (Currently Amended) The computer-readable storage medium of Claim 17 wherein said method further comprises ~~the steps of:~~

~~g) conducting additional utility-dependent auctions when~~
~~auctions when~~ said auction data from ~~said~~ previously conducted utility-
dependent auction is ~~auctions is~~ not sufficient for determining risk
attitudes for said bidders; and

~~h) g)~~ determining risk attitudes for said bidders using said auction
data from said previously conducted auctions and auction data from said
auctions conducted in step ~~g) f)~~ when said auction data from ~~said~~
previously conducted utility-dependent auction is ~~auctions is~~ not sufficient
for determining said risk attitudes for said bidders.

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20. (Original) The computer-readable storage medium of Claim
19 wherein step ~~c) b)~~ further comprises using statistical density
estimation techniques to nonparametrically estimate the joint distribution
of bidders' private information.

21. (Currently Amended) The computer-readable storage
medium ~~computer-readable storage medium~~ of Claim 20 wherein step ~~d)~~
~~e)~~ further comprises using a "quantile matching" method to
nonparametrically estimate risk attitudes for bidders.
